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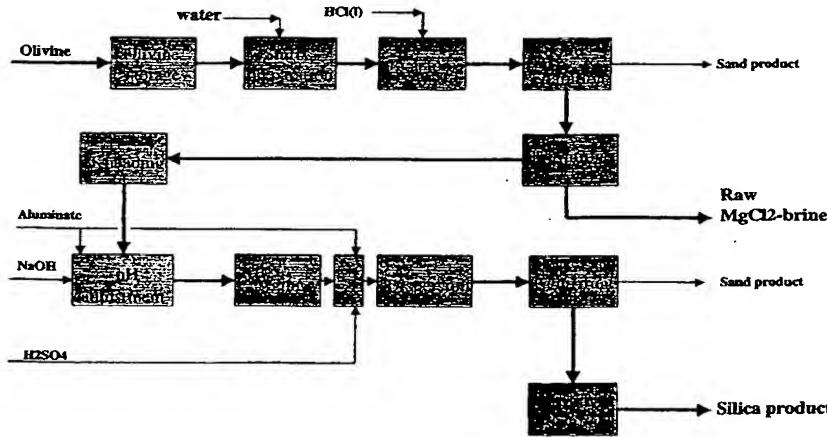
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(54) Title: PROCESS FOR PRODUCTION OF PRECIPITATED SILICA FROM OLIVINE



(57) Abstract: Process for the production of precipitated silica from olivine including the following steps: - providing olivine particles with a particle size preferably below 1 mm in diameter, - preferably mixing olivine and water to form an olivine/water slurry, - mixing the olivine/water slurry with hydrochloric acid (HCl), preferably at a concentration at 18 wt% or above, and at a temperature preferably between 50 - 130 °C, and reacting for a period of time, preferably between 20 - 360 minutes, - removal of coarse mineral impurities (sand product), - separation of precipitated silica from mother solution, - mechanical treatment of the separated precipitated silica and optionally some water to obtain a slurry. - preparation of a low viscosity slurry by adding sodium aluminate or another suitable aluminate, preferably to 100 - 6000 p.p.m., and adjusting the pH, preferably to values between 4 - 9 - ageing at a temperature between 50 - 150 °C according to product requirements - dispersion of silica slurry - removal of fine mineral impurities (sand product) - drying of the silica.



*For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.*